Docket No. AUS000185US1

CLAIMS:

What is claimed is:

1.   A method of deleting object data from a relational database, comprising:

    determining a structure of the relational database;

    determining a delete action based on the structure of the relational database;

    generating database modification commands based on the determined delete action; and

    sending the database modification commands to a relational database server, wherein the relational database server deletes the object data from the relational database based on the database modification commands.

2.   The method of claim 1, wherein determining the structure of the relational database includes invoking a database meta-information class object associated with the relational database.

3.   The method of claim 2, wherein the database meta-information class object encapsulates a dependency structure of the relational database.

4.   The method of claim 3, wherein the database meta-information class object further includes a delete action identifier for each dependent table of a plurality of tables in the relational database.

5.   The method of claim 4, wherein the delete action identifier is one of cascade delete and nullify columns

Docket No. AUS000185US1

delete.

6. The method of claim 1, wherein the delete action is one of cascade delete and nullify columns delete.

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7. The method of claim 2, wherein the database meta-information class object is generated based on a file describing the structure and delete actions for tables in the relational database.

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8. The method of claim 7, wherein the file is an Extended Markup Language file.

9. The method of claim 7, wherein the file is further
15 generated based on user input to override default delete action identifiers in the file.

10. The method of claim 7, wherein the file is further generated based on user input to insert one or more
20 delete constraints in the file for one or more of the tables in the relational database.

11. The method of claim 1, wherein the database modification commands are Structured Query Language (SQL)
25 statements.

12. A system for deleting object data from a relational database, comprising:
    a data processor; and
30   a relational database storage device, wherein the data processor determines a structure of the relational database, determines a delete action based on the

Docket No. AUS000185US1

structure of the relational database, generates database modification commands based on the determined delete action and sends the database modification commands to the relational database storage device, wherein the
5   relational database storage device deletes the object data from the relational database based on the database modification commands.

13. The apparatus of claim 12, wherein the data
10   processor determines the structure of the relational database by invoking a database meta-information class object associated with the relational database.

14. The apparatus of claim 13, wherein the database
15   meta-information class object encapsulates a dependency structure of the relational database.

15. The apparatus of claim 14, wherein the database meta-information class object further includes a delete
20   action identifier for each table of a plurality of tables in the relational database.

16. The apparatus of claim 15, wherein the delete action identifier is one of cascade delete and nullify columns
25   delete.

17. The apparatus of claim 13, wherein the database meta-information class object is generated based on a
30   file describing the structure and delete actions for tables in the relational database.

Docket No. AUS000185US1

18. The apparatus of claim 17, further comprising a file editor application executed by the data processor, wherein the file editor application changes the delete action in the file for one or more of the tables in the
5 relational database based on a user input to override default delete action identifiers in the file.

19. The apparatus of claim 18, wherein the file editor application inserts one or more delete constraints into
10 the file for one or more of the tables in the relational database, based on a user input.

20. A method of generating a class for deletion of data representations of objects in a relational database,
15 comprising:
        determining a structure of the relational database;
        determining one or more delete actions based on the structure of the relational database; and
        generating the class object based on the determined
20 structure and the determined one or more delete actions.

21. The method of claim 20, wherein generating the class object includes encapsulating information identifying the structure of the relational database and the one or more
25 delete actions.

22. The method of claim 21, wherein the one or more delete actions is at least one of cascade delete and nullify columns delete.
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23. The method of claim 20, wherein the one or more delete actions is at least one of cascade delete and

Docket No. AUS000185US1

nullify columns delete.

24.   The method of claim 20, wherein the structure of the
relational database and the one or more delete actions
5   are determined from a file describing the structure and
delete actions for tables in the relational database.

25.   The method of claim 24, wherein the file is further
generated based on user input to override default delete
10   action identifiers in the file.

26.   The method of claim 24, wherein the file is further
generated based on user input to insert one or more
delete constraints in the file.
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27.   An apparatus for generating a class object for
deletion of data representations of objects in a
relational database, comprising:
      means for determining a structure of the relational
20   database;
      means for determining one or more delete actions
based on the structure of the relational database; and
      means for generating the class object based on the
determined structure and the determined one or more
25   delete actions.

28.   The apparatus of claim 27, wherein the means for
generating the class object encapsulates information
identifying the structure of the relational database and
30   the one or more delete actions.

29.   The apparatus of claim 28, wherein the one or more

Docket No. AUS000185US1

delete actions is at least one of cascade delete and
nullify columns delete.

30. The apparatus of claim 27, wherein the one or more
5   delete actions is at least one of cascade delete and
nullify columns delete.

31. The apparatus of claim 27, wherein the means for
determining the structure of the relational database and
10 the means for determining the one or more delete actions
determine the structure and one or more delete actions
from a file describing the structure and delete actions
of tables in the relational database.

15 32. The apparatus of claim 31, further comprising means
for generating the file, wherein the file is generated
based on Java Database Connectivity (JDBC) database
metadata associated with the relational database.

20 33. The apparatus of claim 32, wherein the file is
further generated based on user input to override default
delete action identifiers in the file.

34. The apparatus of claim 32, wherein the file is
25 further generated based on user input to insert one or
more delete constraints in the file.

35. A computer program product in a computer readable
medium for generating a class object for deletion of data
30 representations of objects in a relational database,
comprising:
        first instructions for determining a structure of

the relational database;

second instructions for determining one or more
delete actions based on the structure of the relational
database; and

5   third instructions for generating the class object
based on the determined structure and the determined one
or more delete actions.

36.   The computer program product of claim 35, wherein
10   the third instructions include instructions for
encapsulating information identifying the structure of
the relational database and the one or more delete
actions.

15   37.   The computer program product of claim 36, wherein
the one or more delete actions is at least one of cascade
delete and nullify columns delete.

38.   The computer program product of claim 35, wherein
20   the one or more delete actions is at least one of cascade
delete and nullify columns delete.

39.   The computer program product of claim 35, wherein
the first and second instructions determine the structure
25   of the relational database and the one or more delete
actions from a file describing the structure and delete
actions for tables in the relational database.

40.   The computer program product of claim 39, further
30   comprising fourth instructions for generating the file
based on Java Database Connectivity (JDBC) database
metadata associated with the relational database.

Docket No. AUS000185US1

41. The computer program product of claim 39, wherein the fourth instructions further include instructions for generating the file based on user input to override

5   default delete action identifiers in the file.

42. The computer program product of claim 39, wherein the fourth instructions further include instructions for generating the file based on user input to insert delete

10   action constraints in the file.

43. A computer program product in a computer readable medium for generating a class object for deletion of data representations of objects in a relational database,

15   comprising:

    a meta-information class for determining a structure of the relational database and one or more delete actions based on the structure of the relational database; and

    a database meta-information generator class for

20   generating the class object based on the determined structure and the determined one or more delete actions.

44. The computer program product of claim 43, wherein the database meta-information generator class

25   encapsulates information identifying the structure of the relational database and the one or more delete actions into the class object.

45. The computer program product of claim 44, wherein

30   the one or more delete actions is at least one of cascade delete and nullify columns delete.

Docket No. AUS000185US1

46. A method of generating a class for deletion of data representations of objects in a relational database, comprising:

determining a structure of the relational database;

5   determining one or more default delete actions based on the structure of the relational database;

receiving user input to modify the one or more default delete actions; and

generating the class object based on the determined

10   structure, the determined one or more delete actions and the user input.

47. The method of claim 46, wherein the user input overrides one or more of the one or more default delete

15   actions.

48. The method of claim 46, wherein the user input inserts one or more delete action constraints.

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